

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-44. (canceled)

45. (Currently Amended) A method for balancing the distribution of interference between radio cells in a wireless communication system, the system comprising a plurality of radio cells in which a plurality of subcarrier blocks is used for communication, ~~wherein each subcarrier block comprises a plurality of subcarriers,~~ wherein a number of adjacent radio cells build a cell cluster, wherein the radio cells of the cell cluster each comprise corresponding subcarrier block sets, and wherein each subcarrier block has the same subcarriers, the method comprising ~~the steps of:~~

grouping said subcarrier blocks into a plurality of subcarrier block sets in each radio cell of the cell cluster,

determining a plurality of transmission power levels for each of the radio cells of said cell cluster, and

assigning the plurality of transmission power levels to the subcarrier block sets of one of the radio cells of the cell cluster by taking into account the assignment of the plurality of transmission power levels to the subcarrier block sets of the other radio cells of the cell cluster.

46. (Cancelled)

47. (Currently Amended) The method according to claim ~~45~~ 46, wherein said plurality of transmission power levels is assigned to the subcarrier block sets of the radio cells of the cell cluster, such that:

in each a single radio cell of the cell cluster, ~~there is a mapping of~~ each of said plurality of transmission power levels is mapped to one of the ~~[[a]]~~ subcarrier block sets of a respective set of said single radio cell, and

~~there is a mapping of~~ each of said plurality of transmission power levels is mapped to one of said corresponding subcarrier block sets in the radio cells in ~~of~~ said cell cluster.

48. (Currently Amended) The method according to claim 45, wherein said plurality of transmission power levels is assigned to the subcarrier block sets of the radio cells of the cell cluster, such that:

in each a single radio cell of the cell cluster, ~~there is a mapping of~~ each of said plurality of subcarrier block sets of a respective said single radio cell is mapped to one of the plurality of ~~[[a]]~~ transmission power levels level, and

~~there is a mapping of~~ each of said corresponding subcarrier block sets in the radio cells of said cell cluster is mapped to one of said plurality of transmission power levels.

49. (Cancelled)

50. (Currently Amended) The method according to claim 45, wherein ~~the~~ offsets between the transmission power levels in a radio cell vary between the radio cells of the cell cluster.

51. (Currently Amended) A method for balancing the distribution of interference between radio cells in a wireless communication system, the system comprising a plurality of radio cells, each radio cell ~~of them~~ comprising at least two sectors, ~~wherein~~ in each of which ~~sector~~ a plurality of subcarrier blocks is used for communication, wherein a sector of a radio cell and its adjacent sectors in neighboring radio cells build a sector cluster, the sector cluster comprising corresponding subcarrier block sets having the same subcarrier blocks, wherein each subcarrier block comprising ~~comprises~~ a plurality of subcarriers, ~~wherein a number of adjacent radio cells build a cell cluster,~~ the method comprising the steps of:

grouping said subcarrier blocks into a plurality of subcarrier block sets in each of the sectors of each radio cell of said sector cluster,

determining a plurality of transmission power levels for each sector of each radio cell of the sector cell cluster, and

assigning the plurality of transmission power levels to the plurality of subcarrier block sets of ~~[[a]]~~ one of the respective sectors of the sector cluster, by taking into account the assignment of the plurality of transmission power levels to the subcarrier block sets of the other sectors of the sector cluster ~~sector of a radio cell and its adjacent sectors of said other radio cells.~~

52. (Cancelled)

53. (Currently Amended) The method according to claim 51 ~~52~~, wherein said plurality of transmission power levels is assigned to the subcarrier block sets of radio cells of the cell cluster, such that:

~~in each sector of the sector cluster, a single sector of a radio cell, there is a mapping of~~
each of said plurality of transmission power levels is mapped to one of the ~~[[a]]~~ subcarrier block
sets ~~set of the respective said sector, and~~

~~there is a mapping of~~ each of said plurality of transmission power levels is mapped to one
of said corresponding subcarrier block sets in said sector cluster.

54. (Currently Amended) The method according to claim ~~51~~ 52, wherein said
plurality of transmission power levels is assigned to the subcarrier block sets of radio cells of the
cell cluster, such that:

~~in each sector of the sector cluster, a single sector of a radio cell, there is a mapping of~~
each of said plurality of subcarrier block sets of the respective said sector is mapped to one of the
~~[[a]]~~ transmission power levels ~~level~~, and

~~there is a mapping of~~ each of said plurality of said corresponding subcarrier block sets in
said sector cluster is mapped to one of said plurality of transmission power levels ~~level~~.

55. (Previously Presented) The method according to claim 53, wherein the mapping is
a unique mapping.

56. (Currently Amended) The method according to claim 45, wherein the
communication system comprises a plurality of communication terminals communicating with
base stations associated to said plurality of radio cells of the cell cluster, the method further
comprising ~~the steps of:~~

measuring ~~a~~ the path loss of a communication signal of a communication terminal and another ~~the~~ path loss due to interference from adjacent radio cells/~~sectors~~ for said communication signal, and

assigning the communication terminal to at least one subcarrier block of a subcarrier block set in a radio cell/~~sector~~ based on said measurement.

57. (Currently Amended) The method according to claim 56, further comprising ~~the~~ ~~step of~~ determining a transmission power level for said communication terminal based on said measurement, and wherein the communication terminal is assigned to at least one subcarrier block of a block set based on the determined transmission power level.

58. (Currently Amended) The method according to claim 45, wherein the transmission power levels in different radio cells of the cell cluster ~~/sectors~~ vary.

59. (Currently Amended) The method according to claim ~~45~~ 46, wherein ~~a~~ the subcarrier block set size of the corresponding subcarrier block sets is equal.

60. (Currently Amended) The method according to claim 45, further comprising ~~the~~ ~~step of~~ reconfiguring the subcarrier block sets in a radio cell of the cell cluster ~~/sector~~.

61. (Currently Amended) The method according to claim 45, further comprising ~~the~~ ~~step of~~ reconfiguring the transmission power levels in a radio cell of the cell cluster ~~/sector~~.

62. (Currently Amended) The method according to claim 60, wherein ~~a~~ the reconfiguration of the power levels and/or the subcarrier block sets in the radio cell of the cell cluster is performed in accordance with the other radio cells of a cell cluster.

63. (Currently Amended) The method according to claim 60, wherein ~~a~~ the reconfiguration of the power levels and/or the subcarrier block sets in the sector of the cell cluster is performed in accordance with the other sectors of a sector cluster.

64. (Previously Presented) The method according to claim 60, wherein the reconfiguration is based on channel quality measurements.

65. (Currently Amended) The method according to claim 45, further comprising ~~the step of~~ signaling information related to a reconfiguration of the subcarrier block sets in a radio cell/~~sector~~ from the ~~its~~ radio cell of the cell cluster to at least one other adjacent radio cell of the cell cluster.

66. (Currently Amended) The method according to claim 45, further comprising ~~the step of~~ signaling information related to channel qualities in a radio cell of the cell cluster ~~/sector~~ from said the ~~its~~ radio cell of the cell cluster to at least one other adjacent radio cell of the cell cluster.

67. (Currently Amended) The method according to claim 65, further comprising ~~the step of~~ signaling the information to a control unit in the communication system.

68. (Currently Amended) The method according to claim 56, further comprising ~~the step of~~ signaling information related to a subcarrier block assignment and/or a subcarrier block set assignment to a communication terminal.

69. (Currently Amended) A base station for use in a wireless communication system, the system comprising a plurality of radio cells in which a plurality of subcarrier blocks is used for communication, wherein a number of adjacent radio cells build a cell cluster, and wherein the radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarrier blocks, and wherein each subcarrier block comprises a plurality of subcarriers, ~~wherein a number of adjacent radio cells build a cell cluster,~~ the base station comprising:

a processing unit configured to group ~~means for grouping~~ said subcarrier blocks into a plurality of subcarrier block sets in each radio cell of the cell cluster,

a determination unit configured to determine ~~means for determining~~ a plurality of transmission power levels for each of the radio cells of said cell cluster, and

an assignment unit configured to assign ~~assigning means for assigning~~ the plurality of transmission power levels to the subcarrier block sets of one of the radio cells of the cell cluster by taking into account the assignment of the plurality of transmission power levels to the subcarrier block sets of the other radio cells of the cell cluster.

70. (Previously Presented) The base station according to claim 69, wherein the radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarriers.

71. (Currently Amended) The base station according to claim 70, wherein said ~~assignment unit assigning means~~ is configured adapted to assign said plurality of transmission power levels to the subcarrier block sets of radio cells of the cell cluster, such that:

in each a single radio cell of the cell cluster, ~~there is a mapping of~~ each of said plurality of transmission power levels is mapped to ~~[[a]]one of the subcarrier block sets set of a respective~~ said single radio cell, and

~~there is a mapping of~~ each of said plurality of transmission power levels is mapped to one of said corresponding subcarrier block sets in the radio cells in ~~of~~ said cell cluster.

72. (Currently Amended) The base station according to claim 70, wherein said ~~assignment unit assigning means~~ is configured adapted to assign said plurality of transmission power levels to the subcarrier block sets of radio cells of the cell cluster, such that:

in each a single radio cell of the cell cluster, ~~there is a mapping of~~ each of said plurality of subcarrier block sets of a respective said single radio cell is mapped to one of the plurality of ~~[[a]]~~ transmission power levels level, and

~~there is a mapping of~~ each of said corresponding subcarrier block sets in the radio cells of said cell cluster is mapped to one of said plurality of transmission power levels.

73. (Currently Amended) A base station for use in a wireless communication system, the system comprising a plurality of radio cells in which a plurality of subcarrier blocks is used for communication, ~~wherein each subcarrier block comprises a plurality of subcarriers~~, wherein N adjacent radio cells build a cell cluster, N being an integer number of 2 or more, and wherein

the N radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarrier blocks, and wherein each subcarrier block comprises a plurality of subcarriers,
the base station comprising:

a processing unit configured to group ~~means for grouping~~ said subcarrier blocks into N subcarrier block sets in each radio cell of the cell cluster, wherein the radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarriers,

a determining unit configured to determine ~~means for determining~~ N transmission power levels for each of the radio cells of said cell cluster, and

an assignment unit configured to assign the ~~assigning means for assigning~~ N transmission power levels to the N subcarrier block sets of radio cells of the cell cluster, such that:

in each radio cell of the cell cluster, each of the N transmission power levels in the respective ~~[[a]] radio cell of the cell cluster~~ is assigned to one of the N subcarrier block sets of said respective radio cell of the cell cluster, and

each of the N transmission power levels is assigned to one subcarrier block set of corresponding subcarrier block sets within the radio cells of the cell cluster.

74. (Currently Amended) A base station for use in a wireless communication system, the system comprising a plurality of radio cells in which a plurality of subcarrier blocks is used for communication, ~~wherein each subcarrier block comprises a plurality of subcarriers,~~ wherein N adjacent radio cells build a cell cluster, N being an integer number of 2 or more, and wherein the N radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarrier blocks, and wherein each subcarrier block comprises a plurality of subcarriers,
the base station comprising:

a processing unit configured to group ~~means for grouping~~ said subcarrier blocks into xN subcarrier block sets in each radio cell of the cell cluster, wherein the radio cells of the cell cluster each comprise corresponding subcarrier block sets having the same subcarriers, x being an integer number of 1 or more,

a determination unit configured to determine ~~means for determining~~ yN transmission power levels for each of the radio cells of said cell cluster, y being an integer number of 1 or more, and

an assignment unit configured to assign ~~assigning means for assigning~~ yN transmission power levels to the xN subcarrier block sets of radio cells of the cell cluster, such that:

in each radio cell of the cell cluster, each of the yN transmission power levels in the respective ~~[[a]] radio cell of the cell cluster~~ is assigned to one of the x/N ~~$x?N$~~ subcarrier block sets of said respective radio cell of the cell cluster, and

y/x transmission power levels on average are assigned to one subcarrier block set of corresponding subcarrier block sets within the radio cells of the cell cluster.

75. (Currently Amended) A base station for use in a wireless communication system, the system comprising a plurality of radio cells, each radio cell of them comprising at least two sectors, in each of which ~~wherein in each sector~~ a plurality of subcarrier blocks is used for communication, wherein a sector of a radio cell and its adjacent sectors in neighboring radio cells build a sector cluster, the sector cluster comprising corresponding subcarrier block sets having the same subcarrier blocks, wherein each subcarrier block comprising comprises a plurality of subcarriers, and ~~wherein a number adjacent radio cells builds a cell cluster~~, the base station comprising:

a processing unit configured to group ~~means for grouping~~ said subcarrier blocks into N subcarrier block sets in each of the sectors of each radio cell of said cluster, wherein each sector of a radio cell has N-1 adjacent sectors in the other radio cells of the cell cluster, and wherein a sector of a radio cell and its adjacent sectors in said other radio cells each comprise corresponding subcarrier block sets ~~set~~ having the same subcarriers, N being an integer number of 2 or more,

a determination unit configured to determine ~~means for determining~~ N transmission power levels for each sector of each radio cell of the cell cluster, and

an assignment unit configured to assign ~~assigning means for assigning~~ the N transmission power levels to the N subcarrier block sets of a sector of a radio cell and its adjacent sectors of said other radio cells, such that:

in ~~[[a]]~~ each sector of the sector cluster, each of the N transmission power levels in the respective sector of the sector cluster ~~a radio cell~~ is assigned to one of the N subcarrier block sets of said respective sector of the sector cluster, and

each of the N transmission power levels is assigned to one subcarrier block set of corresponding sectors of the sector cluster.

76. (Currently Amended) A base station for use in a wireless communication system, the system comprising a plurality of radio cells, each radio cell ~~of them~~ comprising at least two sectors, in each of which ~~wherein in each sector~~ a plurality of subcarrier blocks is used for communication, wherein a sector of a radio cell and its adjacent sectors in neighboring radio cells build a sector cluster, the sector cluster comprising corresponding subcarrier block sets having the same subcarrier blocks, each subcarrier block comprising ~~comprises~~ a plurality of

subcarriers, ~~and wherein a number adjacent radio cells builds a cell cluster,~~ the base station comprising:

a processing unit configured to group ~~means for grouping~~ said subcarrier blocks into xN subcarrier block sets in each of the sectors of each radio cell of said cluster, wherein each sector of a radio cell has N-1 adjacent sectors in the other radio cells of the cell cluster, and wherein a sector of a radio cell and its adjacent sectors in said other radio cells each comprise corresponding subcarrier block ~~sets~~ set having the same subcarriers, x being an integer number of 1 or more, ~~and an~~ N being an integer number of 2 or more,

a determination unit configured to determine ~~means for determining~~ yN transmission power levels for each sector of each radio cell of the cell cluster, y being an integer number of 1 or more,

an assignment unit configured to assign ~~assigning means for assigning~~ the yN transmission power levels to the xN subcarrier block sets of a sector of a radio cell and its adjacent sectors of said other radio cells, such that:

in ~~[[a]]~~ each sector of the sector cluster, each of the yN transmission power levels in the respective sector of the sector cluster ~~a sector of a radio cell~~ is assigned to one of the xN subcarrier block sets of said respective sector of the sector cluster, and

y/x transmission power levels on average are assigned to one subcarrier block set of corresponding sectors of the sector cluster.

77. (Cancelled)

78. (Currently Amended) The base station according to claim 73, further comprising:

a measuring unit configured to measure a ~~means for measuring the~~ path loss of a communication signal of a communication terminal and another ~~the~~ path loss due to interference for said communication signal, and

an assignment unit configured ~~assigning means~~ to assign the communication terminal to at least one subcarrier block of one of said subcarrier block sets based on said measurement.

79. (Cancelled)

80. (Currently Amended) A radio communication system comprising a base station according to claim 69 and a communication terminal in a wireless communication system comprising a receiver unit configured to receive ~~receiving means for receiving~~ information indicating a subcarrier block assignment and/or a subcarrier block set assignment, and

a selection unit configured to select ~~means for selecting~~ the signaled assigned subcarrier block and/or signaled assigned subcarrier block set for data transmission.

81. (New) A base station for use in a wireless communication system, the system comprising a plurality of radio cells, each radio cell comprising at least two sectors in each of which a plurality of subcarrier blocks is used for communication, wherein a sector of a radio cell and its adjacent sectors in neighboring radio cells build a sector cluster, the sector cluster comprising corresponding subcarrier block sets having the same subcarrier blocks, each subcarrier block comprising a plurality of subcarriers, the base station comprising:

a grouping unit configured to group said subcarrier blocks into a plurality of subcarrier block sets in each of the sectors of said sector cluster,

a determination unit configured to determine a plurality of transmission power levels for each sector of the sector cluster, and

an assignment unit configured to assign the plurality of transmission power levels to the plurality of subcarrier block sets of one of the respective sectors of the sector cluster, by taking into account the assignment of the plurality of transmission power levels to the subcarrier block sets of the other sectors of the sector cluster.

82. (New) The base station according to claim 81, wherein the assignment unit is configured to assign said plurality of transmission power levels to the subcarrier block sets of radio cells of the cell cluster, such that:

in each sector of the sector cluster, each of said plurality of transmission power levels is mapped to one of the subcarrier block sets of the respective sector, and

each of said plurality of transmission power levels is mapped to one of said corresponding subcarrier block sets in said sector cluster.

83. (New) The base station according to claim 81, wherein the assignment unit is configured to assign said plurality of transmission power levels to the subcarrier block sets of radio cells of the cell cluster, such that:

in each sector of the sector cluster, each of said plurality of subcarrier blocks sets of the respective sector is mapped to one of the plurality of transmission power levels, and

each of said plurality of said corresponding subcarrier block sets in said sector cluster is mapped to one of said plurality of transmission power levels.